

318 GC Hydraulic Excavator

Technical Specifications

Configurations and features may vary by region. Please consult your Cat® dealer for availability in your area.

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Engine		
Engine Model	Cat® C3.6	
Net Power		
ISO 9249	83.1 kW	111 hp
ISO 9249 (DIN)	113 hp (me	tric)
Engine Power		
ISO 14396	90 kW	121 hp
ISO 14396 (DIN)	122 hp (me	tric)
Bore	98 mm	4 in
Stroke	120 mm	5 in
Displacement	3.6 L	220 in ³
Biodiesel Capability	Up to B200	1)

- Meets Brazil MAR-1 emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
- Advertised power is tested per the specified standard in effect at the time of manufacture.
- Net power advertised is the power available at the flywheel when the engine is equipped with fan, air intake system, exhaust system and alternator.
- Engine speed at 2,400 rpm.
- No engine power derating required below 3000 m (9,840 ft) altitude.
- (1) Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels** up to:
 - ✓ 100% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

*For use of blends higher than 20% biodiesel, consult your Cat dealer.

^{**}Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

Swing Mechanism		
Swing Speed	9.56 rpm	
Maximum Swing Torque	46 kN·m	33,840 lbf·ft

Weights		
On anoting William	17.500 1	20, 600 11.
Operating Weight	17 500 kg	38,600 lb

Long undercarriage, Reach boom, R2.6 (8'6") stick, Severe Duty (SD) 0.91 m³ (1.19 yd³) bucket, 700 mm (24") triple grouser shoes and 3250 kg (7,170 lb) counterweight.

Track		
Track Shoes Width	600 mm	24 in
Track Shoes Width	700 mm	28 in
Number of Shoes (each side)	44	
Number of Track Rollers (each side)	7	
Number of Carrier Rollers (each side)	2	
Drive		
Gradeability	35°/70%	
Maximum Travel Speed	5.4 km/h	3.4 mph
Maximum Drawbar Pull	157 kN	35,295 lbf
Hydraulic System		
Main System – Maximum Flow – Implement	296 L/min	78 gal/min
Swing System – Maximum Flow	148 kPa	39 psi
Maximum Pressure – Equipment – Implement	35 000 kPa	5,076 psi
Maximum Procesura Troyal	25 000 l ₂ Po	5.076 pgi

Service Refill Capacities		
Fuel Tank Capacity	285 L	75.3 gal
Cooling System	11 L	2.9 gal
Engine Oil (with filter)	11 L	2.9 gal
Final Drive (each)	3 L	0.8 gal
Hydraulic System (including tank)	190 L	50.2 gal
Hydraulic Tank (including suction pipe)	94 L	24.8 gal

Standards	
Brakes	ISO 10265:2008
Cab/Rollover Protective Structure (ROPS) (optional)	ISO 12117-2: 2008
Cab/Operator Protective Guards (OPG) (optional)	ISO 10262: 1998 – Level II

Sound Performance		
ISO 6395:2008 (external)	104 dB(A)	
ISO 6396:2008 (inside cab)	70 dB(A)	

• Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/ windows open) for extended periods or in a noisy environment.

Operating Weights and Ground Pressures

	600 mm (24") Triple Grouser Shoes		700 mm (28") Triple Grouser Shoes	
	Weight	Ground Pressure	Weight	Ground Pressure
e Machine Configurations	kg (lb)	kPa (psi)	kg (lb)	kPa (psi)
e Frame with Track Rollers and Carrier Rollers				
250 kg (7,170 lb) Counterweight and Long Undercarriage				
Reach Boom + R2.6 (8'6") Stick + 0.91 m ³ (1.19 yd ³) SD Bucket	17 200	40.7	17 500	35.5
	(37,900)	(5.9)	(38,600)	(5.2)
HD Reach Boom + HD R2.6 (8'6") Stick + 0.91 m ³ (1.19 yd ³) SD Bucket	17 300	41.0	17 600	35.7
	(38,100)	(5.9)	(38,800)	(5.2)
Reach Boom + R2.9 (9'6") Stick + 0.91 m ³ (1.19 yd ³) SD Bucket	17 300	41.0	17 500	35.5
	(38,100)	(5.9)	(38,600)	(5.2)
Reach Boom + R2.6 (8'6") Stick + 0.91 m ³ (1.19 yd ³) General Duty (GD) Bucket	17 100	40.5	17 400	35.3
	(37,700)	(5.9)	(38,400)	(5.1)
HD Reach Boom + HD R2.6 (8'6") Stick + 0.91 m ³ (1.19 yd ³) GD Bucket	17 200	40.7	17 500	35.5
	(37,900)	(5.9)	(38,600)	(5.2)
Reach Boom + R2.9 (9'6") Stick + 0.91 m ³ (1.19 yd ³) GD Bucket	17 200	40.7	17 400	35.3
	(37,900)	(5.9)	(38,400)	(5.1)

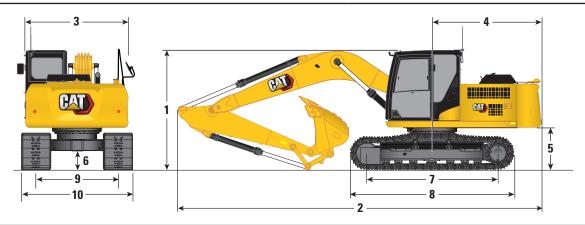
All operating weights include a 90% fuel tank with 75 kg (165 lb) operator.

Major Component Weights

	kg	lb
Base Machine Weight (with 3250 kg [7,170 lb] counterweight, upper frame, long undercarriage with HD track rollers and two boom cylinders – does not include boom, stick, bucket, stick cylinder, bucket cylinders, tracks, fuel tank and operator).	11 700	25,800
Track Shoes:		
600 mm (24") Width, 8.5 mm (0.33") Thick, Double Grouser Track Shoes	2340	5,150
600 mm (24") Width, 8.5 mm (0.33") Thick, Triple Grouser Track Shoes	2340	5,150
700 mm (28") Width, 8.5 mm (0.33") Thick, Triple Grouser Track Shoes	2570	5,670
Two Boom Cylinders	300	650
Weight of 90% Fuel Tank and 75 kg (165 lb) Operator	280	610
Counterweight:		
3250 kg (7,165 lb) Counterweight	3250	7,170
Swing Frame	4260	9,390
Undercarriage (base frame with HD track rollers and HD carrier rollers)	3900	8,590
Booms (including lines, pins, stick cylinder):		
5.1 m (16'9") Reach Boom	1300	2,870
5.1 m (16'9") HD Reach Boom	1310	2,890
Sticks (including lines, pins, bucket cylinder, bucket linkage):		
R2.6 (8'6") Reach Stick	760	1,680
R2.6 (8'6") HD Reach Stick	860	1,890
R2.9 (9'6") Reach Stick	830	1,830
Bucket (without linkage, with tips and side cutters):		
0.91 m ³ (1.19 yd ³) Severe Duty (SD) with Advansys Tips	860	1,890
0.91 m ³ (1.19 yd ³) General Duty (GD) with Advansys Tips	750	1,650

Dimensions

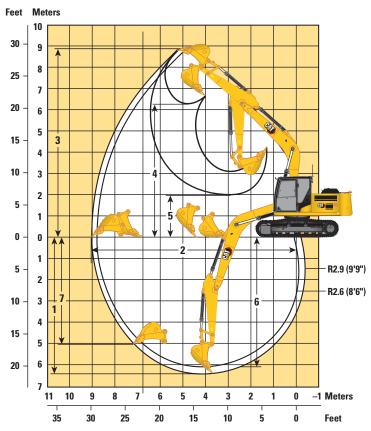
All dimensions are approximate and may vary depending on bucket selection.



Boom Option		Reach Boom			
	5.1 m (16'9")				
Stick Option	Reach Stick				
	R2.6 m (8'6")		R2.9 m (9'9")		
1 Machine Height					
Top of Cab Height	2900 mm	9'6"	2900 mm	9'6"	
Top of OPG Height	3030 mm	9'11"	3030 mm	9'11"	
Shipping Height with OPG (highest point between boom and cab)	3030 mm	9'11"	3060 mm	10'0"	
Shipping Height without OPG	3020 mm	9'11"	3060 mm	10'1"	
Handrail Height	2930 mm	9'7"	2930 mm	9'7"	
With Boom/Stick/Bucket Installed	2970 mm	9'9"	3010 mm	9'10"	
With Boom/Stick Installed	2840 mm	9'4"	2880 mm	9'5"	
With Boom Installed	2450 mm	8'0"	2450 mm	8'0"	
With Boom/Stick/Bucket Installed (with auxiliary lines)	3020 mm	9'11"	3060 mm	10'1"	
With Boom/Stick Installed (with auxiliary lines)	2900 mm	9'6"	2840 mm	9'4"	
With Boom Installed (with auxiliary lines)	2510 mm	8'3"	2510 mm	8'3"	
2 Machine Length	,				
With Boom/Stick/Bucket Installed	8730 mm	28'8"	8740 mm	28'8"	
With Boom/Stick Installed	8690 mm	28'6"	8710 mm	28'7"	
With Boom Installed	7730 mm	25'4"	7730 mm	25'4"	
With Boom/Stick/Bucket Installed (with auxiliary lines)	8730 mm	28'8"	8740 mm	28'8"	
With Boom/Stick Installed (with auxiliary lines)	8690 mm	28'6"	8710 mm	28'7"	
With Boom Installed (with auxiliary lines)	7730 mm	25'4"	7730 mm	25'4"	
3 Upper Frame Width (without walkways)	2880 mm	9'5"	2880 mm	9'5"	
4 Tail Swing Radius	2700 mm	8'10"	2700 mm	8'10"	
5 Counterweight Clearance (without shoe lug)	1030 mm	3'4"	1030 mm	3'4"	
6 Ground Clearance (without shoe lug)	460 mm	1'6"	460 mm	1'6"	
7 Track Length – Length to Center of Rollers	3170 mm	10'5"	3170 mm	10'5"	
8 Track Length – Overall Track Length	3970 mm	13'0"	3970 mm	13'0"	
9 Track Gauge	1990 mm	6'6"	1990 mm	6'6"	
10 Undercarriage Width (without steps):					
600 mm (24") Shoes	2590 mm	8'6"	2590 mm	8'6"	
700 mm (28") Shoes	2690 mm	8'10"	2690 mm	8'10"	
Bucket Type	SD)	GE)	
Bucket Capacity	0.91 m ³	1.19 yd ³	0.91 m ³	1.19 yd ³	
Bucket Tip Radius	1391 mm	4'6"	1386 mm	4'7"	

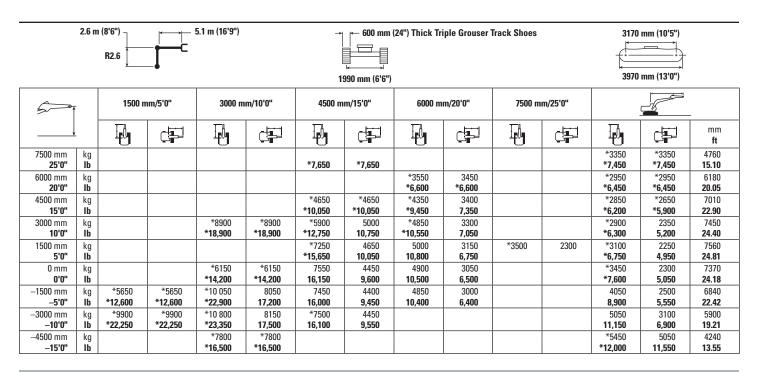
Working Ranges and Forces

All dimensions are approximate and may vary depending on bucket selection.

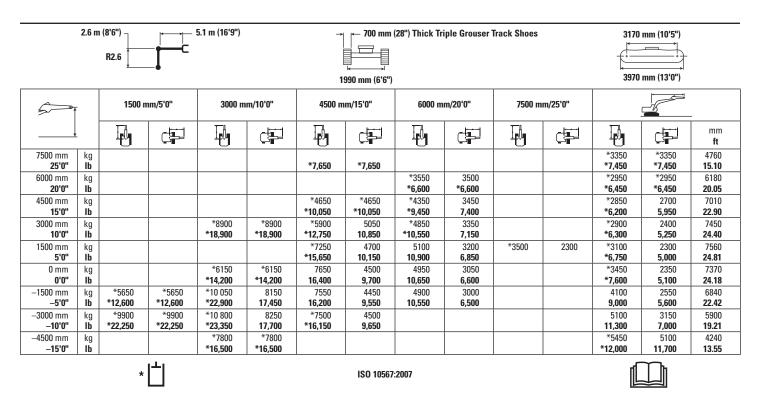


Boom Option	Reach Boom 5.1 m (16'9")				
Stick Option	Reach Stick				
	R2.6 n	n (8'6")	R2.9 n	າ (9'9")	
1 Maximum Digging Depth	6110 mm	20'1"	6410 mm	21'0"	
2 Maximum Reach at Ground Line	8800 mm	28'10"	9010 mm	29'7"	
3 Maximum Cutting Height	8930 mm	29'4"	8890 mm	29'2"	
4 Maximum Loading Height	6270 mm	20'7"	6270 mm	20'7"	
5 Minimum Loading Height	2280 mm	7'6"	1990 mm	6'6"	
6 Maximum Depth Cut for 2440 mm (8ft) Level Bottom	5890 mm	19'4"	6170 mm	20'3"	
7 Maximum Vertical Wall Digging Depth	5070 mm	16'8"	5050 mm	16'7"	
Bucket Digging Force (ISO)	123 kN	27,650 lbf	123 kN	27,650 lbf	
Stick Digging Force (ISO)	80 kN	17,980 lbf	75 kN	16,860 lbf	
Bucket Type	S	SD		D	
Bucket Capacity	0.91 m ³	1.19 yd³	0.91 m ³	1.19 yd ³	
Bucket Tip Radius	1391 mm	4'6"	1386 mm	4'7"	

Reach Boom Lift Capacities – Counterweight: 3.25 mt (7,165 lb) – without Bucket



Reach Boom Lift Capacities – Counterweight: 3.25 mt (7,165 lb) – without Bucket



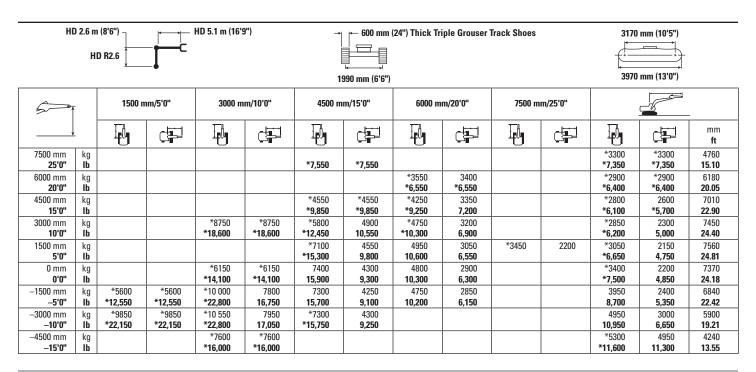
^{*}Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007.

They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

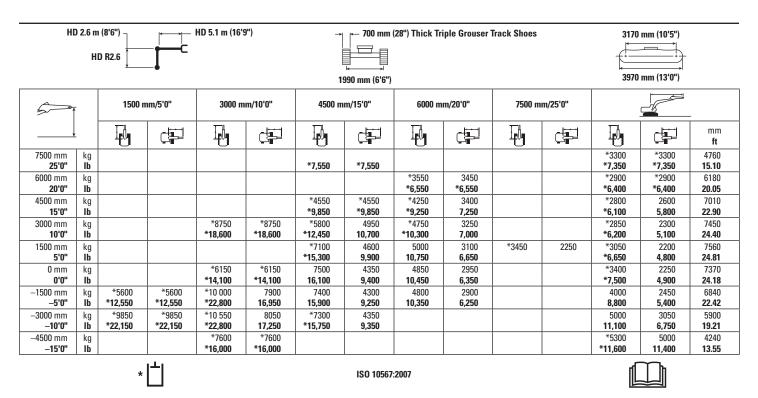
Lift capacity stays with ±5% for all available track shoes.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

HD Reach Boom Lift Capacities – Counterweight: 3.25 mt (7,165 lb) – without Bucket



HD Reach Boom Lift Capacities – Counterweight: 3.25 mt (7,165 lb) – without Bucket



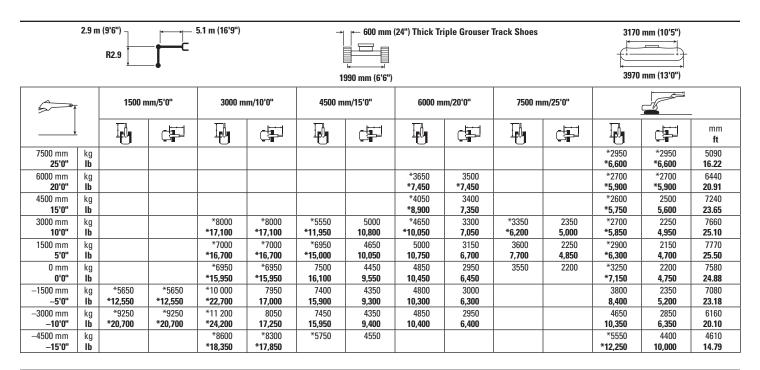
^{*}Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007.

They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

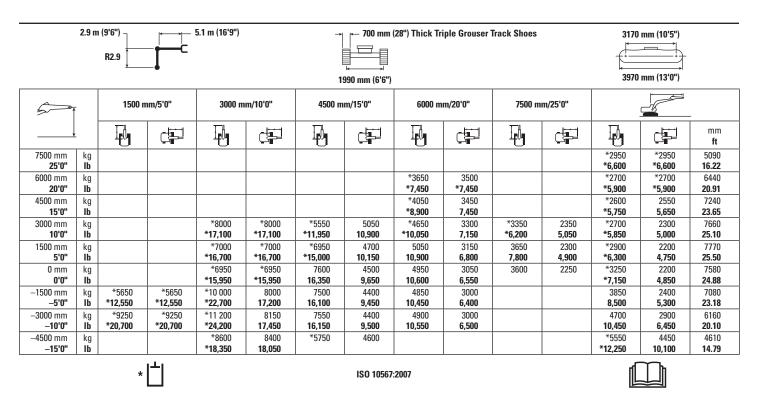
Lift capacity stays with ±5% for all available track shoes.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Reach Boom Lift Capacities – Counterweight: 3.25 mt (7,165 lb) – without Bucket



Reach Boom Lift Capacities - Counterweight: 3.25 mt (7,165 lb) - without Bucket



^{*}Indicates that the load is limited by hydraulic lifting capacity rather than tipping load. The above loads are in compliance with hydraulic excavator lift capacity standard ISO 10567:2007.

They do not exceed 87% of hydraulic lifting capacity or 75% of tipping load. Weight of all lifting accessories must be deducted from the above lifting capacities. Lifting capacities are based on the machine standing on a firm, uniform supporting surface. The use of a work tool attachment point to handle/lift objects, could affect the machine lift performance.

Lift capacity stays with ±5% for all available track shoes.

Always refer to the appropriate Operation and Maintenance Manual for specific product information.

Bucket Specifications and Compatibility

		Width		Capacity		Weight		Fill	Reach Boom	HD Reach Boom	Reach Boom
	Linkage	mm	in	m³	yd³	kg	lb	%	R2.6 m (8'6")	HD R2.6 m (8'6")	R2.9 m (9'6")
Pin-On (No Quick Coupler)											
General Duty	315	1200	48	0.91	1.19	693	1,529	100	•	θ	θ
Severe Duty	315	1200	48	0.91	1.19	802	1,768	90	•	•	•
						kg	2355	2229	2223		
	Maximum load with pin-on (payload + bucket)					lb	5,192	4,914	4,901		

The above loads are in compliance with hydraulic excavator standard EN474-5:2006+A3:2013, they do not exceed 87% of hydraulic lifting capacity or 75% of tipping capacity with front linkage fully extended at ground line with bucket curled.

Capacity based on ISO 7451:2007.

Maximum Material Density:

- 1800 kg/m³ (3,000 lb/yd³)
- ⊕ 1500 kg/m³ (2,500 lb/yd³)

Caterpillar recommends using appropriate work tools to maximize the value customers receive from our products. Use of work tools, including buckets, which are outside of Caterpillar's recommendations or specifications for weight, dimensions, flows, pressures, etc. may result in less-than-optimal performance, including but not limited to reductions in production, stability, reliability, and component durability. Improper use of a work tool resulting in sweeping, prying, twisting and/or catching of heavy loads will reduce the life of the boom and stick.

Attachments Offering Guide

Not all attachments are available in all regions. Consult your Cat dealer for configurations available in your region.

✓ Match

PIN-ON ATTACHMENTS				
Boom Type		Reach Boom	HD Reach Boom	Reach Boom
Stick Length		R2.6 m (8'6")	HD R2.6 m (8'6")	R2.9 m (9'6")
Hydraulic Hammers	H110 GC	✓	✓	✓
	H110 GC Side Mount	✓	✓	✓
	H110 S	✓	✓	✓
	H115 GC	✓	✓	✓
	H115 GC Side Mount	✓	✓	✓
	H115 GC S	✓	✓	✓
	H115 S	✓	✓	✓
	H120 S	✓	✓	✓
Pulverizers	P214 Secondary Pulverizer Jaw	✓	✓	✓
Mulchers	HM4015	✓	✓	✓
	HM4815	✓	✓	✓
Compactors (Vibratory Plate)	CVP75	✓	✓	✓
Rotary Cutters	RC15	✓	✓	✓
	RC20	✓	✓	✓

318 GC Standard and Optional Equipment

Standard and Optional Equipment

Standard and optional equipment may vary. Consult your Cat dealer for details.

	Standard	Optional
BOOM AND STICKS		
5.1 m (16'9") Reach boom		✓
5.1 m (16'9") HD Reach boom		✓
2.6 m (8'6") Reach stick		✓
2.6 m (8'6") HD Reach stick		✓
2.9 m (9'6") Reach stick		\checkmark
CAB		
OPG		✓
Sound suppressed with viscous mounts	✓	
High-resolution 203 mm (8") LCD	✓	
touchscreen monitor		
Mechanically adjustable seat with	\checkmark	
headrest		
Auto bi-level air conditioner	√	
Keyless push-to-start engine control	√	
Floor-mounted adjustable consoles	✓	
1-button joystick	√	
1 slider joystick		✓
AM/FM radio with USB and Auxiliary port	✓	
24V DC outlet	✓	
Cup holder and storage compartments	✓	
70/30 tempered glass windshield	✓	
Openable steel hatch	✓	
Dome light	✓	
Washable floor mat	✓	
CAT TECHNOLOGY		
VisionLink®	√ *	
LECTRICAL SYSTEM		
750 CCA maintenance-free batteries (×2)	✓	
Electrical disconnect switch	✓	
LED left-side boom and chassis lights	✓	
LED right-side boom light		✓
LED cab light		√
NGINE		
Cat® C3.6 single turbo diesel engine	✓	
Three selectable modes: Power, Smart, Eco	✓	
46° C (115° F) high-ambient cooling capability	✓	
-18° C (0° F) cold start capability	√	
Electric fuel priming pump	✓	
	•	
Two-stage fuel filtration system	\checkmark	

	Standard	Optional
HYDRAULIC SYSTEM		
Electronic main control value	✓	
Single type electronic main pump	✓	
Boom and stick regeneration circuits	✓	
Automatic hydraulic oil warm up	✓	
Automatic two-speed travel	✓	
Hammer lines		✓
Hammer floor pedal kit		✓
Element type main hydraulic filter	✓	
High performance hydraulic return filter	✓	
SAFETY AND SECURITY		
Anti-skid plating with countersunk bolts	✓	
Right-hand handrail and hand hold	✓	
Lockable external tool/storage box	✓	
Lockable disconnect switch	✓	
Ground-level engine shutoff switch	✓	
Right-hand-side mirror	✓	
Rearview camera		✓
Signaling/warning horn	✓	
Hydraulic lockout lever	✓	
Travel alarm	✓	
SERVICE AND MAINTENANCE		
Grouped location of filters	✓	
Radiator screen	✓	
Scheduled Oil Sampling (S·O·S SM) sampling ports	✓	
Integrated vehicle health management system	✓	
UNDERCARRIAGE AND STRUCTURES		
Long undercarriage	✓	
600 mm (24") double grouser track shoes		√
600 mm (24") triple grouser track shoes		✓
700 mm (28") triple grouser track shoes		✓
Grease lubricated track links	✓	
Center track guiding guard	✓	
Bottom guards	✓	
Travel motor guards	✓	
Swivel guard	✓	
3250 kg (7,165 lb) counterweight	✓	
Tie-down points	✓	

^{*}Connect subscription only. Additional subscriptions are available. Contact your Cat dealer for availability

318 GC Attachments

Dealer Installed Kits and Attachments

Attachments may vary. Consult your Cat dealer for details.

CAB

- Laminated upper 70/30 glass
- Tempered upper 70/30 glass
- Foot switch with right-hand-side mount

SERVICE PARTS

- Mesh guard full front (not compatible with cab light cover, rain protector)
- Operator Protective Guards (OPG)

318 GC Environmental Declaration

The following information applies to the machine at the time of final manufacture as configured for sale in the regions covered in this document. The content of this declaration is valid as of the date issued; however, content related to machine features and specifications are subject to change without notice. For additional information, please see the machine's Operation and Maintenance Manual.

For more information on sustainability in action and our progress, please visit https://www.caterpillar.com/en/company/sustainability.

Engine

- The Cat C3.6 engine meets Brazil MAR-1 emission standards, equivalent to U.S. EPA Tier 3 and EU Stage IIIA.
- Cat engines are compatible with diesel fuel blended with the following lower-carbon intensity fuels** up to:
 - ✓ 100% biodiesel FAME (fatty acid methyl ester)*
 - ✓ 100% renewable diesel, HVO (hydrotreated vegetable oil) and GTL (gas-to-liquid) fuels

Refer to guidelines for successful application. Please consult your Cat dealer or "Caterpillar Machine Fluids Recommendations" (SEBU6250) for details.

*For use of blends higher than 20% biodiesel, consult your Cat dealer.

**Tailpipe greenhouse gas emissions from lower-carbon intensity fuels are essentially the same as traditional fuels.

Air Conditioning System

• The air conditioning system on this machine contains the fluorinated greenhouse gas refrigerant R134a (Global Warming Potential = 1430). The system contains 0.95 kg (2.1 lb) of refrigerant which has a CO₂ equivalent of 1.359 metric tonnes (1.498 tons).

Paint

- Based on best available knowledge, the maximum allowable concentration, measured in parts per million (PPM), of the following heavy metals in paint are:
- Barium < 0.01%
- Cadmium < 0.01%
- Chromium < 0.01%
- Lead < 0.01%

Sound Performance

ISO 6395 (external)	104 dB(A)
ISO 6396 (inside cab)	70 dB(A)

• Hearing protection may be needed when operating with an open operator station and cab (when not properly maintained or doors/ windows open) for extended periods or in a noisy environment.

Oils and Fluids

- Caterpillar factory fills with ethylene glycol coolants. Cat Diesel Engine Antifreeze/Coolant (DEAC) and Cat Extended Life Coolant (ELC) can be recycled. Consult your Cat dealer for more information.
- Cat Bio HYDO™ Advanced is an EU Ecolabel approved biodegradable hydraulic oil.
- Additional fluids are likely to be present, please consult the Operations and Maintenance Manual or the Application and Installation guide for complete fluid recommendations and maintenance intervals.

Features and Technology

- The following features and technology may contribute to fuel savings and/or carbon reduction. Features may vary. Consult your Cat dealer for details.
- Advanced hydraulic systems balance power and efficiency
- Smart mode matches machine power to digging requirements automatically
- Automatic Engine Control (AEC) system reduces RPM when hydraulic demand is low
- Eco mode minimizes fuel consumption for light applications
- One-touch low idle with automatic engine speed control
- Hydraulic return filter provides longer life with a 3,000-hour replacement interval



For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at **www.cat.com**

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Materials and specifications are subject to change without notice. Featured machines in photos may include additional equipment. See your Cat dealer for available options.

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AEXQ3744 (07-2024) Build Number: 05A (S Am)

